Patent Application of

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for

TITLE: INDIVIDUAL SEAT SELECTION TICKETING AND RESERVATION SYSTEM

CROSS REFERENCE TO RELATED APPLICATIONS

Not applicable

BACKGROUND -- FIELD OF INVENTION

This invention relates to an electronic means by which people can select the exact seat or seats they want for any type of event or reserve an appointment for any activity such as a doctor or dentist appointment or even an appointment to have their car lubed. More specifically, a customer or a ticket re-seller or a venue operator can go, for example, to the internet and select the event or activity for which they want a ticket or tickets or reserve a time and reserve and order the exact seat or seats or the time of their choosing directly online. The seat or seats or reserved time they select is then removed from the inventory for that activity or event and made not available for any other buyer and such is so indicated by a graphical representation or other such indicator on the online

map or picture representing availability of seating or time for that event. For an appointment reservation, the user connects to the internet or other wide area network, such as a bulletin board, from his home of office computer and connects to a page that displays a reservation calendar where he can interact such as to reserve a specific time period for himself.

BACKGROUND OF THE INVENTION AND PRIOR ART

1. Field of the Invention

In accordance with the present invention a remote location ticketing and reservation system for any venue comprises an internet or network compatible computer program constructed generally to afford access to a database, or other record maintained in electronic form, containing information about all sold and unsold seating for any specific venue or event and means and method by which a remote user, through use of a computer terminal or other such device, may access said database or other record and receive at his location through any computer terminal or other such device information about which specific seats remain available and then through a computer mouse or keyboard or other such input device select a specific seat or seats for that specific event and reserve such for himself for use during said event.

2. Prior Art

The inadequacy and inefficiencies of present ticketing and reservation systems is recognized and addressed through this invention. The rapid growth of the internet now make it possible for anyone at his home or office to avail himself of the advantages of the instant invention through a simple internet or other wide area network connection.

Prior art makes a feeble attempt to address the inconvenience of ticket ordering. In U. S. patent 5,797,126 (1988), Helbling, et al., describes a series of individual kiosks in wireless communication with a central station where a visitor can locate events of interest, view an excerpt of scenes from that venue and purchase tickets. This falls far short of the instant invention since it still requires a user to physically visit a remote site to avail himself of the service. Additionally, said prior art makes extensive use of what is called "kiosks" implying that, unlike the instant invention, it is only from his specialized machines that such services may be rendered.

U.S. patent 4,974,252 describes a more interactive theater attendance system where patrons are permitted two way communications between themselves and a broadcast center but this is still far from the objectives of the instant invention and requires that persons be in attendance at the theater and, further, some attendant be present at the remote broadcast center. The instant invention is fully automated and, other than the normal monitoring of any application for a wide area network, requires no human attendance or intervention.

U.S. patent 3,427,438 describes a ticket vending system where sales of tickets can be recorded on a seating layout but, again falls far short of the instantaneous update and automatic operation of the instant invention. U.S. patent 5,333,257 allows for a view from a seat but that is now common for internet applications where a hyperlink to any graphic is routinely provided and ancillary to and even unnecessary to the instant invention. Other prior art does nothing to make ticket ordering or seating reservations more readily available and does nothing to improve the information flow to prospective customers so that they may make a more informed decision about attending any given event.

Consider the traveler who has planned a vacation in, say, New York City and wants tickets for some Broadway show. Presently he has either to phone ahead and accept some one else's definition of what constitutes "best available" or wait until he gets into town and seek out a scalper or reseller agency and he still isn't sure exactly what his seats offer.

Objects and Advantages

Accordingly, besides the objects and advantages of the remote location ticketing and reservation system described in my above patent, several objects and advantages of the present invention are:

(a) to always provide customers with a seat selection comprised of the total of the then best available seats for any given event;

(b) to make equally available to all customers all then available seats for any given event so that said customer may select for himself the seat or seats he wants for that event;

(c) to provide an alternative means to visiting the box office or a ticket reseller for a customer to select and reserve for himself the then best available seat or seats for any arena, stadium, theater, airline flight, or any other such venue where seating is available;

(d) to provide to a ticket sensitive venue operator better control over the seating and seat availability for the various events he offers;

(e) to provide to a ticket sensitive venue operator better accounting for his seating for the various events he offers;

(f) to provide to the general public a more cost effective means by which he may reserve and buy tickets for any given event;

(g) to provide to a venue operator a more cost effective means by which he may sell tickets for any given event;

(h) to provide to the general public an automated 24 hour a day, seven day a week means by which he may reserve and purchase the specific seats he want for an event;

(i) to provide to a venue operator an automated 24 hour a day, seven day a week means by which he may offer reservation and purchase of a seat or seats that are individually selectable by a customer;

(j) to permit the venue operator to avoid overbooking an event;

(k) to permit the venue operator to avoid underbooking an event;

(l) to permit a doctor or other professional for whom his time is a commodity to better schedule and regulate his time and interact with patients or others in the online environment;

(m) to provide to the general public a 24 hour a day, seven day a week means by which they may schedule appointments with doctors, dentists, automotive mechanics and the like with full knowledge that the appointment time they select is still available.

Further objects and advantages are to provide any venue operator the benefit of better control over his ticket inventory and sales such as to improve his profitability and the efficiency of his operation and to provide to the general ticket buying public better information and an easier means by which they may acquire their desired ticket or tickets for any event.

SUMMARY OF THE INVENTION

The ticketing and reservation system of the present invention, in one particular embodiment thereof, includes a computer program operating on a server for a wide area network (WAN), generally described by the flow chart of Figure 1 and the accompanying code example which implements the instant invention in practice:

First, when a user accesses the system means is provided to initialize the process and return to the user a menu from which he selects his venue of interest. This can be a selectable menu arranged by artist or date or time or specific theater or football team or baseball team or name or activity or any combination thereof such that the user is given sufficient information from which to make a decision. An example would be someone looking for the next event at a given theater at a time that starts at 7:00pm. One of many possible series of computer instructions to perform this function is:

< -.Send database query to retrieve all venues that are currently available in the system - >

< - Server receives and processes query - >

< - Query is looped until all available performances and venues are retrieved. - >

< - Markup Language engine converts result to display compatible format for output to client computer - >

< - Begin normal markup language here - >

< - Begin reservation process selecting the event date/time next to the desired venue ->

THEN, upon user submittal, the server initializes the process of returning to the user all available seats:

< -.Send database query to retrieve all seats that are currently available in the system for this event - >

< - Server receives and processes query - >

< - Query is looped until all available seats are retrieved. - >

< - markup language engine converts result to markup language format for output to client computer - >

< - Begin normal markup language here - >

< - Continue reservation process by selecting the desire seat or seats ->

THEN, upon user submittal we create a new customer record in the Wide Area Network server and tell the system which database to connect to to fulfill the users request(s):

< - Send database command to insert new record in customer database and obtain record id - >

< - Send database command to insert new record in reservation "order" database and obtain record id - >

< - Send database command to insert new record for each selected seat in the reservation "detail" database - >

< - Begin normal markup language here - >

< - Continue reservation process by requesting client payment information - >

THEN, upon user submittal the information is passed for verification:

< - Submit client information for verification - >

< - if verification is successful, send database command to update customer record in customer database with information previously collected - >

< - if verification is successful, send database command to update reservation record in reservation "order" database with verification information - >

< - if verification is successful, send database command to remove selected seats from seat inventory database and marked as no longer available for future selection - >

< - Markup language engine converts result to markup language format for output to client computer - >

< - Begin normal markup language here - >

< - If verification is successful, confirmation is generated via Markup language engine to markup language format for output to client computer - >

< - if verification is unsuccessful, a failure notice is generated via Markup language engine to markup language format for output to client computer - >

< - if verification is unsuccessful, client is presented with option to provide his payment information again or abandon his reservation - >

While this is one preferred form of the code there are many other code sequences that will perform the same function that will be immediately obvious to one skilled in the art.

BRIEF DESCRIPTION OF THE DRAWINGS

The aforementioned objects and advantages of the present invention as well as additional objects and advantages thereof will be more fully understood hereinafter as a result of a detailed

description of a preferred embodiment when taken in conjunction with the following drawings in which:

FIG 1 is a block diagram of the present invention illustrating the major components thereof and the interactivity that takes place between the potential customer and the instant invention.

FIG 2 is an illustration of the concept of the present invention utilizing the internet as the Wide Area Network to which users connect to perform the desired function and shows an example of a remotely located user accessing the functionality of the instant invention for purposes of reserving seats for a dinner theater performance in a distant city.

FIG 3 is a illustration of the concept of the present invention refined down to the functionality of reserving specific seats and blocking from duplicate sale those seat that are already reserved.

Figure 4 is a sample of the screens seen by a remote user of the instant invention during a session wherein he selects and orders 4 specific seats for a distant dinner theater show.

Figure 5 is a complete code set for one preferred embodiment of the present invention.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENT

Referring to FIG 1, it will be seen that the operator of a venue implements the instant invention for purposes of allowing remotely located users to reserve specific seating for specific events **1**. By doing so, he initiates those certain actions necessary to displaying an internet web site to all online users **2**. A prospective customer for the venues offering(s) logs onto the internet **3** and acquires the aforesaid internet web site **4** which implements the instant invention. He can be connected to the internet by any conventional means yet this by no means implies that the wide area network must be what is commonly referred to as the "internet." Upon first contact by the prospective customer, an inquiry is directed to the appropriate database, which may be located concurrent with the primary server hosting the program for the instant invention or may be located remotely, such as at the physical location of the venue, asking for a return of information to the prospective customer of all appropriate information contained therein relative to his inquiry **5**. The prospective customer indicates his desired seat or seats through conventional computer input means and directs that information back to the server hosting the code necessary to the implementation of the instant invention **6**. Upon contact **7** the server again makes an appropriate

database query and returns to the prospective customer all pertinent information relating to his selection, such as which seats are still available for the chosen performance, airline flight, boxing match, etc. The prospective customer is then presented with a representation of all then available seating for his selected venue **8**. From this representation, the prospective customer makes his selection of a seat or seats by indicating such through a mouse click, keyboard entry or other means, such as but not limited to a touch screen. Simultaneously, the server, through the coding necessary to implement the instant invention, creates a temporary customer identification **9** that is used to associate this potential customer with his later selections and permit system use by multiple simultaneous users. Once the customer has made his seat selection he is asked for payment information **10**. That information is processed through conventional internet or other electronic means and once the information and payment are verified **11a** the customer information, as supplied in **10**, is made permanent and the seat or seats he has selected are removed from inventory and blocked from duplicate sale, both graphically when presented to the next prospective customer and in the database where information for accounting and administrative purposes is retained. If the customer's payment information cannot be verified **11b** then he is given an opportunity to correct the information or start over with a new transaction. Upon verification of the customers payment information he receives a confirmation of the transaction **13** containing all appropriate reference information for his records.

Referring to FIG 2, it will be seen that, for example, a user in Houston **13** is planning to vacation in New York and wishes to see a play at a dinner theater there that utilizes the present invention for ticketing and reservations **15**. The user in Houston, or in any other location worldwide, connects to the internet in the conventional way and retrieves the appropriate web site through his graphical browser from a server located in, say, Anaheim, California **14**. Through implementation of the instant invention the user is able to see the exact seating arrangement of the remote dinner theater and select the exact seat or seats he wants for the performance of his choice. Such

additional information as is appropriate can be provided to the remote user to assist him in making an informed decision as to which seat or seats he wishes to occupy for this performance.

Referring to FIG 3, it will be seen that in view (a) of the user selected venue all seats at table P11 **17** and at table S14 **18** have been previously taken and are so indicated by the graphical representation of an "X" over those seats. Our potential customer wants to seat a party of four at table S1 **16** and so indicates by clicking his mouse on those four seats or by so indicating through alternative standard computer input means. Once his payment method is verified his selected seats are removed from inventory and so indicated on the graphical representation by placing an "X" over those seats **19** while retaining the "X" over those seats previously sold at table P11 **20** and table S14 **21**. The next prospective customer is advised that these seats are no longer available for this performance by the new graphical representation that is his first viewing screen upon entry into the system. In the event that two prospective customers wish to reserve the exact same seat or seats, that prospective customer who first receives validation of his payment method is given those seats while the other prospective customer is notified that while making his decision the seats he wants have already been sold and offers him a chance to select other seating

Referring to Figure 4, one will see the screens presented to a user when he accesses the system and as he progresses through the process of selecting a specific seat or seats then reserves and pays for them. Figure 4(a) is where the first screen presented shows links to available performances for that selected venue **22**. Figure 4(b) is the second screen **23** and shows a view of the seating available for that venue with seats that have already been taken crossed off with an "X" **24**. Our hypothetical user decides that he would like to have his party of four sit at table S11 **25** and selects the four seats around that table by clicking on them with his mouse. As he moves his mouse over individual seats the seat number appears in the window at the bottom of his screen **26** and when he clicks on a seat it is added to a running tally of the seats he has already taken **27**. Only seats have not previously been taken show up in the mouse-over window **26**. After completing his selections the user clicks on the "Reserve Seats" button and Figure 4(c) shows his

next screen which asks him for his payment information **28**. He enters the required information and again clicks the "Reserve Seats" button **29**. Figure 4(d) is the next screen and it tells him that his payment method has been accepted (or rejected) and relates information about the transaction **30** such as his transaction code and the receipt number that he can use as a ticket or as a voucher with which to redeem his ticket or tickets at the venue box office when he arrives for the performance. Finally, Figure 4(d) shows the opening screen the next visitor to the system is presented with the same set of screens except that the seats reserved by our hypothetical user **31** are marked off as already taken.

Referring to Figure 5, one will see one of many possible coding schemes making possible the results of the present invention.

Those having skill in the art to which the present invention pertains will now understand that there are virtually unlimited uses for the present invention. By way of example, the present invention may be readily used to reserve specific seats on commercial airliners or reserve specific staterooms on a cruise ship, as well as for reserving seats for any venue from community theater or little league baseball to major league sporting events.

The present invention has been described in sufficient detail to enable one skilled in the art to make and use the invention. Accordingly, specific details which are readily available in the art or otherwise conventional have been omitted to prevent obfuscation of the essential features of the invention.

In view of the foregoing it will be understood that the present invention may be implemented in a variety of alternative methods but that all such implementations are deemed to be within the scope of the present invention which is to be limited only by the claims appended hereto:

I claim:

1. A method of reserving space or time or reserving and buying tickets for attendance or seating at any event or activity comprising the steps of:

(a) communicating on demand through a wide area network to any and all devices connected to said wide area network such information as is contained in a database populated with a